

Life History of *Pseudalmenus chlorinda chloris* (Lepidoptera: Lycaenidae)

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On 10th January, 1959, in a gully near Katoomba (Blue Mountains, New South Wales) a search of a 6 ft. high plant of *Acacia elata* (Cedar Wattle) revealed a number of larvae attended by small black ants. From their appearance there was little doubt that these larvae were those of the butterfly *Pseudalmenus chlorinda chloris*, as they closely resembled those of the subspecies *fisheri* as illustrated and described by Tindale (1953). The attendant ants when disturbed stuck their tails in the air and when killed smelt strongly.

Another bush of Cedar Wattle, situated nearby, was almost denuded of its leaves but contained no larvae. A close search resulted in finding two pupae under a stone a few feet from the base of the plant. These pupae were brought home and kept in a cool place in a box in the dark with a small entrance into a cage. The first butterfly (a male) emerged on 30th August 1959 and the second (a female) emerged on 8th October 1959. This was surprising as it indicated that the butterflies would be on the wing for a greater period than had been previously recorded.

Two larvae brought home and fed on *A. elata* consumed large quantities of their foodplant, rate of consumption being far above the average local butterfly larva. This may have given the impression in the past that a large number of larvae were on the plant, whereas only three or four may denude a small bush. A visit to the same locality in November 1959 revealed numbers of the butterflies flying around the top of a tall Cedar Wattle. The tree contained many dead branches and it appeared as if the attendant ants were nesting in hollows in the dead branches. The tree was too tall and decayed for a safe investigation. The butterflies flew high around the top of the tree, too high to be caught. On this visit both eggs and young larvae were found on small bushes of the foodplant near the tall tree. At the beginning of December 1961 a visit was again made and larvae collected near the previous locality. Having cultivated a plant of *Acacia elata* it was possible to bring home a supply of larvae. These larvae had all pupated by the end of December. It was also noted that the larvae were eating galls on their foodplant.

Waterhouse (1932) refers to collecting "several pupae" but does not describe the larvae or eggs. It is doubtful if the life history of this subspecies has been recorded.

Ovum: very pale blue, mandarin shaped, heavily pitted. From two to five eggs laid together in the forks of the branches or near borer holes along the stems. None were found on the leaves.

Larva: Black, marked with dark chocolate and dark greenish brown lines and bands; a biscuit coloured stripe down the sides with a dark mauve stripe under the biscuit coloured stripe. Head black and concealed under the first segment. White stripes on each side of the first segment; two yellow oval markings on the third and eighth segments; two white marks like an inverted V on the last segment; white hairs on each segment; underneath pale green.

Pupa: Dull black and rough. Found under stones near the foodplant or in curled leaves or hollows made by borers and occupied by the attendant ants.

It has been found in captivity that the larvae do not seek hollow wood or curled leaves in which to pupate unless attended by their escorting ants.

A check on other localities similarly situated would be worth while, bearing in mind that the butterflies keep to the tops of tall specimens of their food plant. Specimens of the butterfly have been found at Blackheath during sleety weather (D. McAlpine, personal communication).

REFERENCES.

- Tindale, N. B., 1953. New Rhopalocera and a list of species from the Grampian Mountains, Western Victoria. *Rec. S. Austr. Mus.* 11:43-68, pls. xviii-xxi, figs. 1-4.
Waterhouse, G. A., 1932, "What Butterfly is That?" Sydney.